

## CLAIMS

1. An evacuation apparatus comprising:

5 a first vacuum pump connected to a vacuum chamber; and  
a second vacuum pump connected to said first vacuum pump;  
wherein said first vacuum pump has a pair of multistage  
pump rotors.

2. An evacuation apparatus according to claim 1, wherein

10 each of said multistage pump rotors has an inlet-side rotor  
and an outlet-side rotor, and an axial width of said inlet-side  
rotor is larger than an axial width of said outlet-side rotor.

3. An evacuation apparatus according to claim 1 or 2,

15 wherein said first vacuum pump is started after said second  
vacuum pump is started.

4. An evacuation apparatus according to any one of claims

1 to 3, wherein a rotational speed of said multistage pump  
20 rotors is controlled based on a temperature of a gas delivered  
by said evacuation apparatus, a pressure of the gas, a  
temperature of a rotor casing for housing said multistage  
pump rotors, or electric current flowing into a motor for  
rotating said multistage pump rotors.

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5. An evacuating apparatus according to any one of claims

1 to 4, wherein said first vacuum pump and said second vacuum  
pump are accommodated in a single enclosure.

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